Response: Stopping the Outbreak



ystematic and rapid response. A few words. A huge undertaking. That's the job of the three outbreak response teams at the Food and Drug Administration (FDA).

These teams—part of FDA's CORE (Coordinated Outbreak Response and Evaluation) Network—can provide simultaneous response to multiple outbreaks. And in August 2011, weeks after CORE was launched, its capabilities were put to the test. One of the deadliest U.S. outbreaks of foodborne illness was underway.

"We hit the ground running," says Allen Gelfius, the FDA consumer safety officer who was then acting leader of Response Team 2, which was assigned to the outbreak of illnesses caused by *Listeria monocytogenes*.

CORE's Signals and Surveillance Team had done the up-front work, scouting out cases and collecting valuable information about them.

Enter the Response Team. Its mission is to conclusively identify the outbreak's source, and cut it off before more illness spreads. Team members include consumer safety officers (FDA staffers with a background in science), environmental health experts, epidemiologists, veterinarians and microbiologists.

The team assigned to each incident coordinates the response, working closely on strategy with field staff in FDA districts, state public health and agriculture departments, state rapidresponse teams, the Centers for Disease Control and Prevention (CDC) and others.



FDA photo by Michael Ermarth

CORE Team leaders from left: Jeffrey Brown (Signals and Surveillance Team), Carla Tuite (Response Team), Brett Podoski (Post-Response Team), Pamela LeBlanc (Response Team) and William Lanier (Response Team). For captioned photos and quotes from these CORE Team leaders, go to Flickr: www.flickr.com/photos/fdaphotos/7697419646/

About this Series

This is the third in a series of four Consumer Updates on FDA's CORE (Coordinated Outbreak Response and Evaluation) teams. The last article will introduce you to the Post-Response Team.

- CORE's First Year
- Signals and Surveillance: Finding the Outbreak
- Post-Response: Preventing the Next Outbreak

For this article and links the other CORE Series articles online, go to www.fda.gov/ForConsumers/ConsumerUpdates/ucm314851.htm



Over the next few days, the team coordinated a massive effort to get the product off the market.

The team continually redefines objectives, assigns roles, and develops new strategies to determine the source of the outbreak. The team works with internal and external partners to notify retailers and consumers, and ensure the product is removed from the marketplace.

The Timeline

On Sept. 7, 2011, CORE's Signals and Surveillance Team transferred the *Listeria* outbreak to Response Team 2. Based on interviews by Colorado Department of Public Health and Environment investigators of those who had fallen ill, cantaloupes seemed a likely suspect, but the illness had never been traced to whole cantaloupes before.

Many of those who had become ill mentioned that they had eaten a uniquely sweet cantaloupe branded or labeled as Rocky Ford. After further investigation and laboratory testing, a source of these cantaloupes was traced to Jensen Farms in Colorado, which was in the midst of harvesting, packing and shipping.

Over the next few days, the team coordinated a massive effort to get the product off the market.

Sept. 7

- Signals Team determines response warranted for multi-state spread of illnesses involving an FDAregulated product.
- Transfers case to Response Team.

Sept. 8

- Response Team holds first of a series of Incident Action Plan meetings to develop objectives, strategies and assignments.
- Response Team reaches out to Colorado Department of Public Health and Environment and FDA Denver District Office, which

- were already working together on investigative strategies.
- The Colorado Department continues to interview people who have become ill and reports findings to CDC. CDC provides updates to FDA.

Sept. 9

- FDA's Denver office collects cantaloupe samples from retail locations where the people who became ill reported buying cantaloupes and sends to Denver FDA lab. Nine out of 10 samples test positive for Listeria monocytogenes.
- Response team analyzes all incoming data, starts traceback for sources of distribution.
- Team examines epidemiological and distribution data and narrows down source to four growers (one of which had ceased distribution).

Sept. 10

- FDA and state teams visit Jensen Farms.
- Product samples collected from the field and packing house; environmental swabs taken from the cooler, equipment and packing house.
- The testing later yields three of four strains of Listeria known to be associated with all illnesses.
- The broker for Jensen Farms halts distribution of cantaloupes and tells grocery stores to remove Jensen Farms cantaloupes from shelves.

Sept. 14

• Jensen Farms issues voluntary product recall.

Lt. Cmdr. Willy Lanier, U.S. Public Health Service (USPHS), leader of Response Team 3, says, "We always try to look at the bigger picture. We take the 30,000-foot view. But we also have to get up close and personal on the details."

Supervisory consumer safety officer Pamela LeBlanc, current leader of Response Team 2, says the volume of records involved in tracing back an outbreak to its source can be daunting, especially considering that many are paper records. "We can end up with thousands of pieces of paper to go through in order to find a common supplier, a common distribution route," she adds.

Lt. Cmdr. Carla Tuite, USPHS, supervisory consumer safety officer and leader of Response Team 1, notes that other parts of the job include coordinating visits to various facilities, documenting all activities, keeping other FDA divisions informed, contacting labs, and constantly re-examining where the investigation is heading.

Roberta Hammond, manager of CORE's three response teams, says solid working relationships with state and local regulatory, health and agricultural officials are critical. "They are the ones who are constantly on the scene and the relationships they've forged with local retailers, farmers, labs, and others go a long way toward moving the investigation along, and quickly," she says.

"The illnesses and deaths were tragic," Gelfius says. "But the outstanding cooperation from all involved kept those numbers from being dramatically higher."

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